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KNOWLEDGE EMPOWERED SOCIETY THROUGH DIGITAL INDIA PROGRAMME 2015

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ABSTRACT

Hon'ble Prime Minister Narendra Modi launched an ambitious digital India Programme on July 1st 2015 at the Indira Gandhi Indoor stadium in the National capital. This initiative aims to strengthen the technical infrastructure for e-governance and e-commerce in the country, and also hopes to reach out to 250,000 panchayats, enlarge the scope of citizen delivery services and allow a greater participation of citizens as part of the Centre's 'Minimum Government and Maximum Governance' approach. Digital India has been proposed to bridge the divide between digital "haves" and "have-nots". This would ensure broadband connectivity at village level; improved access to services through IT enabled platforms, greater transparency in government processes and consumption of local content and host of other services. This programme is envisaged as a vehicle for growth. It is rightly said by the Mr. Modi that Information Technology plays important role to make India a digital country, in his words "India Today(IT) +Information Technology(IT)=India Tomorrow(IT)". This paper gives an overview about digital India with its nine pillars i.e. Broad Band highway, Universal access to phone connectivity, Public internet access programme, E-governance, E-kranti, Information for all, electronic manufacturing, IT for job and early harvest programme including impact and challenges of Digital India Programme.

KEYWORDS: Digital India, Information Technology, E-Governance, Empowerment

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Original Article

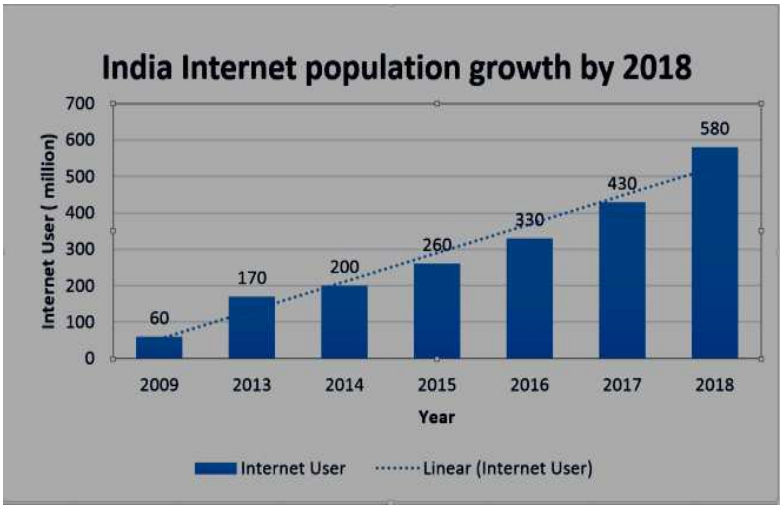
INTRODUCTION

A good governing body requires a good communication platform to communicate with the stakeholders efficiently. Communicating with the citizens has been a big challenge for the government of India with widespread geography, massive population, and enormous linguistic & cultural diversity. The efficient way to communicate with the citizens of the world's largest democracy with a population of 1.2 billion is only possible by connecting with everyone on a 'digital platform'. Though India is considered as the IT powerhouse of the world, there is a huge digital divide. In order to create participative, transparent and responsive government Hon'ble Prime Minister Narendra Modi launched the much ambitious digital India programme on July 1st, 2015 at the Indira Gandhi indoor stadium in the national capital.

Digital India is a central programme to make India ready for a knowledge-based future. The focus of the Rs 1.13 lakh crore initiatives is on using technology to create a participative, transparent and responsive government. The Digital India initiative is a dream project of the Government to transform India into a digitally empowered society and knowledge economy. The Prime Minister is expected to launch the logo of the programme and also unveil various schemes like Digital Locker, e-education and e-health. The programme includes projects

that aim to ensure that government services are available to citizens electronically and people get benefit of the latest information and communication technology.

Figure 1: Growth of Internet Users (India is Going on Digital)



(**Source:** BCG Analysis)

As figure 1 Exhibit that number of people assessing internet in India will jump from 190 million as on June 2014 to over 550 million in 2018.This will make possible through near universal to 2G reach, 3G and government intervention on such key issue such as public access, connectivity, cost and consumer awareness.Reduced government intervention will reset in lower growth user based resulting in approximately 400 million internet user by 2018. Hence, these figures indicate that India is on the path of 'Digital India'.

This vision is centered on three key areas:

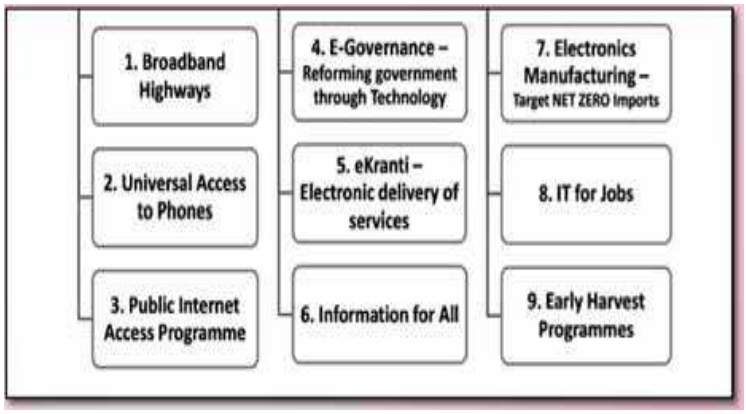
- To create a digital infrastructure as a utility to every Indian citizen. This includes providing high-speed internet, mobile phone and bank account enabling participation in digital & financial space, shareable private space on a public cloud, and creating a safe and secure cyber space.
- The programme aims to take digital literacy to the next level, and will focus on finding ways to encourage people to opt for cashless financial transactions.
- The initiative also aims at seamless integration across departments/jurisdictions, and ensuring availability of services in real time from online and mobile platforms.

These three vision areas further encompass nine themes or 'pillars' of Digital India.

NINE PILLARS OF DIGITAL INDIA

The Digital India initiative covers many important projects like National e-Governance Plan, National Knowledge Network, National Optical Fibre Network, digital cities, etc. which will help in digital inclusion in the country and empower the citizens to eradicate the digital divide.

Figure 2: Nine Pillars of Digital India



(**Source:** Department of Electronics and Information Technology, GOI, Report)

- **Broadband Highways**

The government with the vision of "Digital India" has allocated `5 billion to build high speed broadband highways connecting all the villages, government departments, universities, R&D institutes, etc. The digital development sees broadband as a key driver in addressing the challenges in the millennium development Goals primarily through fibre networks.

The National Optical Fibre Network (NOFN) project, funded by the Universal Service Obligation Fund, has set the stage for providing broadband access to the country's 250,000 Gram panchayats by 2016. BSNL, RAILTEL (telecom arm of the Indian Railways), and Power Grid Corporation are the three PSUs responsible for this mammoth task.

Table 1: E-Governance State Level Initiatives

Project	State	Details
Mobile One	Karnataka	Provides access to 4500 services in the public and private domain. It helps in income tax return, railway inquiry, ticket booking, etc.
e-FIR system	Odisha	Crime and Criminal Tracking Network and System (CCTNS) were launched to make the registration of FIRs.
e-Cabinet	Andhra Pradesh	By using e-Cabinet app the state ministers accessed all the data and the agenda for the meeting digitally.
e-Registration	Maharashtra	Facility to digitally registering properties.
PRISMS	Maharashtra	E-Governance for jails in India. Prison management
RTA's SMS service	Telengana	The Road Transport Authority (RTA) began a new SMS service for both, its field staff and citizens.
Digital Locker	Maharashtra	In an Aadhar-linked facility, it is an online repository for important documents like certificates, degrees, etc. frequently required for job application.

(**Source:** Report 2015 Deloitte Touche Tohmatsu India Pvt. Ltd.)

- **Universal Access to Mobile Connectivity**

This focuses on mobile network penetration, with a plan to fill the gaps in connectivity in India by 2018. Though mobile networks have reached most populated parts of India, the last mile is a long one: 42,300 villages still exist outside the reach of a mobile signal. DoT will be the nodal department and project cost will be around Rs 16,000 Cr during FY 2014-18.

- **Public Internet Access Programme**

This aims to increase the number of government-run facilities (Common Service Centers or CSC) that provide digital services to citizens, especially in remote or rural areas with low connectivity. The objective is to increase the 140,000 facilities to 250,000, or one in nearly every village. It also aims to convert 150,000 post offices into multi-service centers. The vision is that the longest distance a villager or tribesperson should have to travel should be to the nearest CSC.

- **E-Governance**

The National e-Governance Plan (NeGP) has been formulated by the Department of Electronics and Information Technology (DeitY) and Department of Administrative Reforms and Public Grievances (DARPG). There are many different initiatives from central government as well as state-governments under the NeGP project to ensure government services are available to citizens electronically.

- **E-Kranti**

The e-Kranti project provides electronic delivery of services to the citizens. The government has allocated 5 billion for the e-Kranti project which includes many sub-level projects.

Table 2: E-Kranti Sub-Level Projects

Sub-Projects	Initiatives	Organizations
e-Health	Online, medical, consultation, medicine supply, online availability of medical report and patient information	Onco NET, Kerala and Tamil Nadu, Medical Literature Analysis and Retrieval System (MEDLARS)
e-Education	Broadband Connected Schools, Free Wi-Fi in all schools, Digital Literacy program & Massive Online Open Courses	Sakshat Portal (Ministry of HRD and IGNOU), Aakash Tablet, National Repository of Open Education Resources (NROER), National Electronic Library
Technology for Farmers	Real time price information, Online ordering of inputs Online cash, loan, relief payment with mobile banking	Farmer's Portal, Kissan Portal &Kisaan call center
Technology for Planning	GIS based decision making, National GIS Mission Mode Project	Planning Atlas of states
Technology for Security	Mobile Emergency Services, National Cyber Security Co-ordination Center	Mobile App 'Himmat' and 'Abhayam' for women safety, iClik (Instant Complaint login Internet Kiosk) centers
Technology for Financial Inclusion	Mobile Banking, Micro-ATM programme, CSCs/ Post Offices	Kiosk Banking – Public /Private banks,Mobile Banking – Telcos,Payment Aadhar based Micro-ATM payments
Technology for Justice	e-Courts, e-Police, e-Jails, e-Prosecution	e-Court mission mode projects at state and central level,e-Cabinet, Andhra Pradesh,e-FIR system, Odisha,PRISMS, Maharashtra

(**Source:** Report 2015 Deloitte Touche Tohmatsu India Pvt. Ltd.)

- **Information for All**

This set of web, mobile and social media platforms aims to connect citizens with the government. It is already well under way, both on social media, and the citizen portal MyGov.in**.**

- **Electronics Manufacturing**

This plan aims for "net zero imports" in electronics, or imports that match exports by value, by 2020. India stands

to import three quarters of the $400bn worth of electronics products it will consume in the next five years. Hardware exports as of now are still under $10bn. This call for a very big ramp-up in local manufacturing.The plan includes incentives for big chip fabrication as well for mobile and set-top box manufacturers, and clusters and incubators for start-ups. India exports nearly $100bn worth of technology and business process services.

- **IT for Jobs**

This is a project to train 10 million students from smaller towns and villages for IT sector jobs over five years. The technology sector increasingly finds that the dwindling manpower resources available for its jobs are under-trained and mismatched to its needs. Most firms are forced to invest a great deal into their own training for "fresher" recruits.

- **Early Harvest Programmes**

This initiatives focus on this keys areas such as Wi-Fi in All Universities, IT Platform for Messages, Government Greetings to be e-Greetings, Biometric attendance, Secure Email within Government, Standardize Government Email Design, Public Wi-fi hotspots, School Books to be eBooks, SMS based weather information, disaster alert and National Portal for Lost & Found children.

IMPACTS OF DIGITAL INDIA

A digitally connected India can help in improving social and economic condition of people living in rural areas through development of non-agricultural economic activities apart from providing access to education, health and financial services.

- **Economic Impact**

According to analysts, the Digital India plan could boost GDP up to $1 trillion by 2025. It can play a key role in macro-economic factors such as GDP growth, employment generation, labor productivity, growth in number of businesses and revenue leakages for the Government. As per the World Bank report, a 10% increase in mobile and broadband penetration increases the per capita GDP by 0.81% and 1.38% respectively in the developing countries. The Digital India project itself will create employment opportunities for 17 million.

- **Social Impact**

Modern ICT makes it easier for people to obtain access to services such as education, healthcare, and banking. The digital India project will be helpful in providing real-time education and partly address the challenge of lack of teachers in education system through smart and virtual classrooms. Mobile and internet banking can improve the financial inclusion in the country. M-health can promote innovation and enhance the reach of healthcare services.

- **Environmental Impact**

The major changes in the technology space have not only brought changes to the economic system but are also contributing to the environmental changes. The next generation technologies are helping in lowering the carbon footprint by reducing fuel consumption, waste management, greener workplaces and thus leading to a greener ecosystem. The ICT sector helps in efficient management and usage of scarce and non-renewable resources.

THE IMPENDING CHALLENGES

The Digital India initiative is an ambitious project of the Government and is, by far, the biggest ever conceived. There are many challenges discussed below that could come in the way of successful completion of the project.

- ***High Cost of Implementation*:** Approximate cost of implementing this mammoth project is 1.13 trillion
- ***Time Overrun:*** The NOFN project which is the back bone of the Digital India project has been delayed several times and is suffering two years' time overrun.
- ***Lack of Coordination Among Departments:*** It is an umbrella project involving participation of several departments and demanding commitment & effort. Hence, strong leadership and timely support of all the involved entities will play a critical role.
- ***Poor Private Participation:*** The private participation in the government projects in India is poor because of long and complex regulatory processes.
- ***Uniform and Fast Adoption of Internet:*** About 4 billion people in the world do not have Internet connection and India comprises of 25% of them. Faster adoption of Internet will be difficult due to illiteracy, affordability and availability of mobile devices and data tariffs, lack of local language content, lack of regionally relevant Apps. Still the use of Internet is low because of high data tariffs.
- ***Infrastructure:*** Though the National Optic Fibre Network (NOFN) project is aiming to build a nationwide high speed broadband by the end of the year 2016-17. There are other supporting infrastructure deficits, such as lack of robust and large data centres to hold the data of entire country.
- ***Cyber Securities:*** Nation Crime Records Bureau (NCRB) report shows the rapid increase in cybercrime in India by 50% from 2012 to 2013. Putting the data of 1.2 billion people on the cloud could be risky and could threaten the security of individuals and the nation. Hence, the Digital India project demands very strong network security at all levels of operation.

CONCLUSIONS

Digital India programme is one of the highly ambitious initiatives of Government of India to integrate the government departments and the people of India. The Digital India is transformational in nature and would ensure that Government services are available to citizens electronically. This helps in achieving the objectives of Education for all, Information for all, Healthcare for all, Broadband for all if the government focuses on strong leadership structure, enables private participation, creates detailed implementation plan with common 'citizen centric' framework and robust security/ privacy measures, and ensures integrated efforts from all departments. The digital business models not only help in reaching to wider audience, but at the same time, make the services more affordable, attractive and feasible for the end users. While there are many obstacles in the path of Digital India program, one major of which is electricity. But this problem will soon be solved as there will be pressure on local leaders to get electricity in their village when Digital India program will be running in the nearby villages.

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